LEAKY-WAVE DUAL POLARIZED SLOT TYPE ANTENNA

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H/e 11/22/05

Technical Field

The present invention relates to a micro stripline feeding slot type planar antenna, more particularly, to a leaky-wave dual polarized slot type antenna, capable of transmitting and receiving orthogonal polarized waves.

Background Art

Radars used in ultra high frequency bands and microwave bands, base station antennas, and antennas for using in satellite communications and satellite broadcasts should have high gains. To have high gains, antennas must have directivity, for example, parabolic antennas.

However, since a parabolic antenna occupies a large surface area for high gain, communication equipment of a base station should be substantially large. Also, surface of the antenna is usually coated with endocrine disrupter containing materials, not to be rusted. As a result, the parabolic antenna causes environment pollution not only when it is used but also when it is disposed.

As an attempt to solve the above problems, radio connection methods for reducing size and weight of communication equipment of a base station, development of power controller and interference controller, terminal, and network system techniques are making active progress. Especially, a planar antenna such as a microstrip line antenna is small, light and thin, so it is very convenient to use and its price is substantially low.

The planar antenna, e.g. microstrip line antenna, is utilized for military communications where mobility and maneuverability are required. High